



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/823,127	04/13/2004	Kevin T. O' Dougherty	N95.12-0017	3502								
7590 William F. Ryann ATMI, Inc. 7 Commerce Drive Danbury, CT 06810		03/16/2007	<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">CARTAGENA, MELVIN A</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>3754</td><td></td></tr></table>		EXAMINER		CARTAGENA, MELVIN A		ART UNIT	PAPER NUMBER	3754	
EXAMINER												
CARTAGENA, MELVIN A												
ART UNIT	PAPER NUMBER											
3754												
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE									
3 MONTHS		03/16/2007	PAPER									

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/823,127

Applicant(s)

O' DOUGHERTY ET AL.

Examiner

Melvin A. Cartagena

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-15 and 20-23 is/are rejected.
- 7) ☒ Claim(s) 7-10 and 16-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim s 1-5, 12, 13 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,756,367 to Mitchell et al.

Mitchell shows a device with an inner container 13 for holding a liquid disposed inside an outer container 12, a coupling 34 for connecting the device 10 to a gas source and introduce gas between the inner and outer container for pressurizing the inner container and force the liquid of the inner container out, a valve 31 connected to a gas passage in communication with the inner container interior to evacuate any gas head accumulated in the headspace above the liquid in the inner container.

The device of Mitchell performs the claimed method steps of containing a product in an inner container, evacuating the head space gas from the inner container, supplying pressure between the inner container and the outer container to force the liquid out from the inner container, as claimed in method claims 1-5.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,756,367 to Mitchell et al. in view of US 4,313,419 to Lyon et al.

Mitchell shows all claimed features as discussed above except for liquid sensor between the gas passage and the headspace gas. Lyon shows a gas-evacuating valve 6 controlled by controller 30 in response to signal from liquid sensors 7 and 8. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Mitchell to include a liquid sensor in the gas line to automatically evacuate any gas accumulated in the headspace and indicate when the container is full as taught by Lyon.

The device of the Mitchell-Lyon combination performs the method of sensing the head gas flow as claimed in claim 6.

5. Claims 11, 15, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,756,367 to Mitchell et al. in view of US 5,764,522 to Shalev.

Mitchell shows all claimed features as discussed above except for an empty detect system that includes weighing the content of the container. Shalev shows a system utilizing a feedback of load sensors 18 to determine the level condition of the product in the product container. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Mitchell to include a weighing system to monitor the level

Art Unit: 3754

condition of the product in the container to automatically and accurately maintain a record of the product usage during operation of the device as taught by Shalev.

The Mitchell-Shalev combination performs the method weighing the fluid container while the liquid is used in a manufacturing process and determining when the container is empty as claimed in claim 11.

***Allowable Subject Matter***

6. Claims 7-10 and 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Siretchi et al. shows a detector of air bubbles in a circuit of fluid.

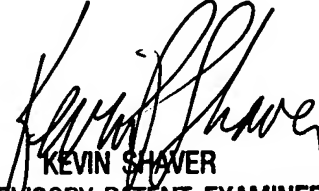
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on T-F (7:30AM to 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAC 3/13/07  
MAC

  
KEVIN SHAVER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700